Serum theophylline levels after influenza vaccination

To the editor: The article by Dr. Kenneth W. Renton and colleagues (Can Med Assoc J 1980; 123: 288-290) reporting the effect of influenza vaccine on the elimination of theophylline, and a letter to the editor from Dr. Susannah Walker and associates (1981; 125: 243-244) on the same issue have raised our concern about the safety of influenza vaccine for persons receiving theophylline and related drugs. Unfortunately, we were well into our annual influenza vaccine program before the article became known to us, thereby precluding our observing many patients. We wish to share data that we collected on five patients.

The patients ranged in age from 44 to 76 (mean 60.6) years, had obstructive pulmonary disease but were not confined to bed and were taking a product containing methylxanthine. When the patients arrived in our clinic they were advised of our concern, and all agreed to cooperate. A blood sample was then obtained for assay of theophylline, and 0.5 ml of influenza vaccine (Fluogen, 1981-82 formulation, Parke-Davis) was given intramuscularly. The patients were asked to continue their regular schedule of medication, to note any symptoms and to return in 24 hours for repeat blood sampling.

We found no significant variation in the serum theophylline levels at the two times. Furthermore, the five patients did not experience side effects.

From this small sample we cannot confirm the findings of Renton and colleagues, but we hope we can study larger numbers of patients next influenza season.

LYNN BRITTON, PH D FREDERICK L. RUBEN, MD Montefiore Hospital and schools of pharmacy and medicine University of Pittsburgh Pittsburgh, Pennsylvania

Friends and families of psychiatric patients

To the editor: We write to applaud and support the views expressed by Dr. Ruth Sky concerning friends and families of the handicapped (Can Med Assoc J 1982; 126: 362). We wish to include in this group the relatives of psychiatric patients. Although the problems they confront may be quite different, the emotions they experience are similar: guilt, sadness, frustration and anger.

In addition, psychiatric illness continues to be stigmatized in a way that medical illness is not. This leads to a reluctance to use supports for fear of an unfavourable reaction, or of having friends and family politely but firmly avoid any involvement. The end result is that patients' primary supporters are themselves left feeling alone and without help. Much has been written in recent years about the phenomenon of "burnout" occurring in professionals and paraprofessionals who provide health care, particularly to chronically handicapped patients.1 Relatives of patients have had the dubious distinction of paraprofessional status thrust upon them — not by choice, but because they care. But this does not make them any less susceptible to burn-out.

With these thoughts in mind, we must go further than greeting relatives with a smile. We must make every effort to aid friends and families and encourage them to help themselves. If compassion does not move us to support and develop the programs that these families need, selfinterest should. Clearly, different types of illness pose different problems and require different solutions. However, peer group assistance and the opportunity to discuss problems with flexible, informed and nonjudgemental medical professionals will contribute considerably to easing the burden such families bear.

JOHN F. THORNTON, MB, FRCP[C]
ELIZABETH PLUMMER, RN
MARY V. SEEMAN, MD, FRCP[C]
Department of psychiatry
University of Toronto
Clarke Institute of Psychiatry
Toronto, Ont

Reference

1. FREUDENBERGER HJ: Staff burn out. J Soc Issues 1974; 30: 159-165

False claims for magnetotherapy

To the editor: In response to many requests from physicians regarding medical applications of magnetic fields the following information should be helpful.

This treatment is one of many dubious devices characterized by little more than placebo effect, but for which grandiose and misleading claims are often made. There has been a great increase lately in the promotion of these devices, the use of which, it is claimed, is "indicated" in the treatment of at least 30 different conditions, including arthritis, bone fractures, metabolic disorders, migraine, dysmenorrhea, congestive cardiac failure, retinitis, insomnia and sexual impotence. Magnetotherapy is being promoted in many countries as a virtual panacea by highly active sales personnel with a reference list of over 200 selected articles, not including the many articles that show no evidence of usefulness.

The units used for this therapy consist

of a coil through which the direct current passes and may be pulsed 1 to 50 times per second. The patient, or the limb, is placed in the magnetic field, which can reach a value of 10 mT. This very low level approximates that found near a small 100-W power transformer. Previous research has shown no obvious adverse effects of long-term exposure to static magnetic fields up to 1500 mT.

Findings in the literature concerning magnetotherapy vary considerably and often conflict. There is also a suggestion that electromagnetic fields may delay rather than encourage fracture healing. It is known that osteogenesis can be stimulated by a direct electrical current. The pulsed magnetic fields used in magnetotherapy could induce currents of a few picoamperes that might conceivably have a healing effect. The research results are controversial and, despite the fact that many articles have been written and thousands of patients "treated", no properly controlled trial has been done

In conclusion, there is no scientific evidence of any usefulness of magnetotherapy.

JOHN A. ORPIN, MB, CH B, BA SC
Medical adviser
Division of medicine
Bureau of medical devices
Health protection branch
Department of National Health and Welfare
Ottawa, Ont.

Schizophrenics and tranquillizers

To the editor. There are two potentially harmful side effects associated with the therapeutic action of tranquillizers: the psychosocial effect, which prevents the patient from becoming normal as long as the tranquillizer is used, and tardive dyskinesia. Only tardive dyskinesia is receiving much attention in the current psychiatric literature. It is probably the least serious side effect, as it can be treated quickly and successfully by restoring the manganese levels and giving niacin or niacinamide. It can be prevented by orthomolecular treatment.²

I have treated several thousand schizophrenics over the past 20 years. The only patients with tardive dyskinesia came into my practice with the condition already established, and they responded to treatment with manganese and vitamins. This is the experience of many psychiatrists using similar treatments. I am convinced that the addition of microgram quantities of manganese to each tranquillizer would, in time, eliminate tardive dyskinesia as a side effect.

The psychosocial effects of tranquillizers are more serious. The action of